ASM Sc. J., 12, 2019
https://doi.org/10.32802/asmscj.2019.266

Factors Associated with Sexual Intimacy among Malaysian Elderly Couples: A Cross-Sectional Study

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Sexual intimacy is an essential aspect of life regardless of age and proven to increase the quality of life of older persons. This study aimed to identify the determinants that predict sexual intimacy among elderly couples in Malaysia. A total of 1934 elderly were selected throughout Peninsular Malaysia and also Sabah and Sarawak. A validated questionnaire was used consisted of socio-demographic information, presence of chronic diseases, perceived present health status, satisfaction with current life, Body Mass Index, disability, social support and sexual intimacy sections. Despite still sleeping with their spouses (60.8%), majority of the respondents claimed incapable of having sexual intercourse (71.0%). Good sexual intimacy in later life was determined by being married and received good social support from family members and friends. On the other hand, those who aged 70 and above, female, non-Malay, had informal education, had gastritis, perceived their current health status as satisfactory, unsatisfied with current lifestyle and disabled were having a significant likelihood of having poor sexual intimacy at old age. The findings indicated the importance of being healthy and having good social support, which includes still having a spouse to maintain sexual intimacy in old age.

Keywords: sexual intimacy; old age; determinants; Malaysia

I. INTRODUCTION

Malaysia is experiencing rapid population ageing that attracts many scholars and researchers to explore the needs and issues related to the elderly, which include sexuality. Although sexual behaviours have a positive impact on the quality of life of the elderly (Flynn & Gow, 2015), this aspect is under-researched. With the increasing life expectancy, adequate focus should be given in identify determinants of better well-being and quality of life of elderly people. The discussions related to sexual behaviours do not remain an uncomfortable topic to be discussed in public but also with health care professionals (Buttaro *et al.,* 2014).

Open discussions related to sexual issues have been a stigma among the Malaysian, especially involving elderly, that reflects the influences of sociocultural aspects in shaping the perceptions, beliefs and behaviours of the community. Intimacy does not always mean sexual contact but refers to a close feeling shared between two people, which can be in the form of emotions, social relationship, and physical intimacy such as touching, cuddling and also sexual activity. Meanwhile, sexuality is a multidimensional concept related to sexual desire, sexual act and values, and sexual beliefs (Kaiser, 1996). It involves the whole

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experience of a person's sense of self, ability to form relationships with others, feelings about themselves, and the impacts of the physiological changes of ageing on their sexual functioning (Kamel, 2001).

Most of the time, disengagement in sexual activity is related to the absence of a spouse, which is a common scenario in later life, especially among elderly women. According to McNicoll (2008), if an elderly can have sex and has a spouse to engage, sexual activity and satisfaction can last up to their 90s. However, sexuality is considered as the province of youth with many sexual myths and stereotypes work against elderly and sexuality in old age (Easy Living Inc., 2015). The declining intention to have sex in later life is not only restrained by the beliefs that they are no longer physically attractive, loss of spouse but most of the time related to the perceived negativity and myths that retrained elderly from sharing and revealing their sexual desire and problems. This sexual myth maybe more prominent in a certain culture or community, but yet has never been adequately explored. In a study by Lindau *et al.* (2007) among the elderly in the United States reported that the majority of elderly involved in a sexual relationship and view it as important in their life. They also found that the frequency of sexual activity did not significantly decrease as age increase through 74 years of age, despite a high prevalence of bothersome sexual problems (>50%).

Promoting sexual awareness of elderly is necessary and important because a sexual relationship can improve the elderly's general well-being through love, intimacy and closeness. (Wallace, 1992). Sexual contact also correlates to better health, higher relationship satisfaction and easier stress management (Mat Din *et al.*, 2019; Schwartz, 2011). There also a positive correlation between the frequency and importance of sexual behaviours with quality of life ($r = 0.52$ and 0.47, respectively, both p-value < 0.001) (Taylor & Gosney, 2011). Commonly, the elderly is described as not having an interest in or not able to have enjoyable sex. However, according to a report by Brecher (1984) that most elderly were interested in sex, and many lead active sex lives and enjoy sexual activity. The report was supported by the following results from a survey of over 10,000 people, with 42% responded as such. According to the results of the survey, although sexual activity was reduced as they ages, more than half of the female and male elderly were reported to be sexually active after the age of 70 years old (65% and 79% respectively).

Additionally, older women are perceived even to have less interest in sex than older men and it is even a bigger stigma for older women to discuss sexuality openly. It is not an issue related to menopause, but instead more related to poor physical and mental health, a breakdown in communication, and an absence of emotional closeness (Shelley, 2017). Older women value more on the quality and length of relationship and communication with their spouses in order to develop and experience of sexual interest (Shelley, 2017).

The disparity between sexual activities with a spouse among male and female elderly is not because of the difference of gender but mainly due to women tend to live longer than men (Byer *et al.,* 1999). Additionally, older women tend not to remarry, especially to younger men after the death of their spouse, that leads to older men generally still have sexual spouses, whereas most older widowed women remain single.

Unfortunately, sexuality or the problems related to sexual issues faced by the elderly are also receiving very little attention in any national framework involving the elderly (Minhat *et al.*, 2019a). This gap in government policy mirrors the general perception and prejudices of an 'asexual' old age, of sex in older people being disgusting, or simply funny (Taylor & Gosney, 2011). Thus, the main objective of this study was to explore the sexual intimacy in later life among Malaysian elderly couple.

II. METHODS

The findings of this study were based on the data from a nationwide community-based survey entitled 'Determinants of Wellness among Older Malaysian: A Health Promotion Perspective', which was conducted in 2010, using the National Household Sampling Frame which was obtained from the Department of Statistics Malaysia during the sampling process. It consists of enumeration blocks derived from the Population and Housing Census, Malaysia 2000. A two-multistage random sampling method was used to obtain the sample. In the first stage of sampling, enumeration blocks were selected, and in the second stage, living quarters of each selected enumeration block were randomly chosen. Finally, from each selected household, one respondent, 60 years and older, was interviewed. Eligibility criteria for selected respondents were Malaysian older people aged 60 years and above, capable of completing questionnaire orally,

living in community and ambulatory. Those who were bedridden, living in an institution and having severe symptoms of dementia were excluded. The data was collected by trained enumerators by face-to-face interviews, using a set of questionnaires. The enumerator was trained on correct execution of the questionnaire item, scoring of the questionnaire and taking response from respondents. The questionnaire set consisted of 8 sections namely socio-demographic information, presence of chronic diseases, perceived present health status (good/ satisfactory/ poor), satisfaction with current life (satisfactory/ unsatisfactory), Body Mass Index (BMI), disability, social support and sexual intimacy.

The chronic diseases were measured based on the presence of common diseases among the elderly diagnosed and confirmed by validated medical practitioners such as hypertension, diabetes, arthritis and others. The BMI was categorised into underweight, normal and overweight based on the recommendation by the World Health Organization. The BMI value of less than 18.5 is considered underweight, 18.5 to 24.9 as normal weight, 25.0 to 29.9 as overweight and more than 30.0 as obese (WHO, 2000). The disability was measured using the 12 items WHO Disability Assessment Schedule (WHODAS), which is an established tool to assess health and disability, including mental, neurological and addictive disorders. 12 item WHODAS uses 5 level response rating coded as 0, 1, 2, 3 and 4 as 'no difficulty', 'mild difficulty', 'moderate difficulty', 'severe difficulty' and 'extreme difficulty or cannot do'. This study used simple total score scoring for the 12 items WHODAS with conversion to percentage. Percentage of lower than 50% was considered as disabled.

Meanwhile, social support was measured using the short 6 items Lubben social network scale. It is a self-report measure of social engagement, including among family and friends. As for sexual intimacy, respondents were asked if they still sleeping and capable of having sex with spouses. For the analysis, the sexual intimacy was categorised into 'Poor' and 'Good', with 'Good' implying those who answered 'Yes' for the two items. Ethical approval for this study was obtained from the university ethical research committee, Universiti Putra Malaysia.

For descriptive statistics, a categorical variable was presented in the form of frequency and percentage. Due to the used of face to face interview with respondents, this study had limited missing values. For data analysis, simple logistics regression was used to determine factors of sexual intimacy without adjusting for other factors. Simple logistic regression result was present in the form of crude odds ratio (OR) with 95% confidence interval and p-value. Multiple logistic regressions were used to identify the predicting factors of sexual intimacy when adjusting for other factors. Data were presented as adjusted odds ratios (AOR) with 95% confidence interval and p-value. Significance level was set at 0.05 for all analysis. Statistical analysis was done using SPSS version 19.

III. RESULTS

A total of 1934 participated in this study. However, 511 (26.4%) respondents were refused or did not answer one of the intimacy items (*Do you still capable of having sex?*). Thus, the response rate in this study was 73.6%. Table 1 is showing the characteristics of the total elderly involved in the survey. The total frequency of respondents (Table 1) showed the percentage of respondents who agreed to participate in this study. For descriptive statistics of study variables according to sexual intimacy, 1423 samples were used after removing the non-response cases. Majority of the elderly were younger, aged less than 70 years old (64.1%), Malay (54.2%), still married (66.9%), received formal education (63.5%), satisfied with their current lifestyle (90.2%), overweight (59.4%), had no disability (94.2%), received good social support from family members and friends (53.2%) and still sleeping with spouse (60.8%) but incapable in having sex (71.0%). The proportions of male and female respondents were almost similar (959 and 975, respectively). Most of them perceived they had good health status (50.8%). The prevalence of poor sexual intimacy was 61.9%, women showed higher prevalence compared to men. The prevalence of sexual intimacy, according to study variables, is presented in Table 1.

Table 1. Characteristics of respondents

Factors	Frequency (n=1934) (%)	Sexual Intimacy (n = 1423)	
		Poor (%) (n = 881)	Good (%) (n = 542)
Age			
60-69	1240 (64.1)	456 (51.8)	438 (80.8)
≥70	571 (29.5)	425 (48.2)	104 (19.2)
Gender			
Male	959 (49.6)	323 (36.7)	362 (66.8)
Female	975 (50.4)	558 (63.3)	180 (33.2)
Ethnicity			
Malay	1048 (54.2)	457 (51.9)	374 (69.0)
Chinese	232 (12.0)	114 (12.9)	69 (12.7)
Indian	91 (4.7)	47 (5.3)	28 (5.2)
Other	563 (29.1)	263 (29.9)	71 (13.1)
Marital status			
Single	640 (33.1)	486 (55.2)	9 (1.7)
Married	1294 (66.9)	395 (44.8)	533 (98.3)
Educational level			
Formal	1229 (63.5)	463 (52.6)	447 (82.5)
Informal	705 (36.5)	418 (47.4)	95 (17.5)
Perceived current health status			
Good	982 (50.8)	406 (46.1)	340 (62.7)
Satisfactory	668 (34.5)	322 (36.5)	138 (25.5)
Poor	284 (4.7)	153 (17.4)	64 (11.8)
Life satisfaction			
Satisfactory	1745 (90.2)	793 (90.0)	501 (92.4)
Unsatisfactory	189 (9.8)	88 (10.0)	41 (7.6)
BMI			
Underweight	174 (9.0)	110 (12.5)	29 (5.4)
Normal	612 (31.6)	283 (32.1)	163 (30.1)
Overweight	1148 (59.4)	488 (55.4)	350 (64.6)
Disability (WHODAS)			
Normal	1821 (94.2)	816 (92.6)	534 (98.5)
Disabled	113 (5.8)	65 (7.4)	8 (1.5)
Social support (LUBBEN)			
Poor	905 (46.8)	458 (52.0)	181 (33.4)
Good	1029 (53.2)	423 (48.0)	361 (66.6)
Number of disease present			
No disease	307 (21.6)	151 (17.1)	156 (28.8)
1	401 (28.2)	240 (27.2)	161 (29.7)
2	346 (24.3)	230 (26.1)	116 (21.4)
≥3	369 (25.9)	260 (29.5)	109 (20.1)

Sexual intimacy			
Still sleeping with a spouse			
Yes	1176 (60.8)		
No	758 (39.2)		
Still capable of having sex			
Yes	542 (28.0)		
No	881 (45.6)		
Refused to answer	511 (26.4)		

Abbreviation: BMI = body mass index; WHODAS = World Health Organization Disability Assessment Schedule.

Meanwhile, Table 2 is showing the results of a multivariate analysis of factors associated with poor sexual intimacy. Results of simple logistic regression showed age, gender, marital status, ethnicity, educational level, perceived health status, BMI, WHODAS, social support and number of chronic diseases were significantly associated with poor sexual intimacy. Further analysis using multiple logistic regression revealed age, gender, marital status, ethnicity, WHODAS, social support and number of chronic diseases were significant factors of sexual intimacy. The model was highly significant [χ^2 (df)= 703.10 (10), p-value <0.001)]. Those who aged 70 and above (AOR= 3.31, 95% CI: 2.41, 4.55), female (AOR= 2.00, 95% CI: 1.47, 2.69), other race (AOR= 2.18, 95% CI: 1.47, 3.23), received only informal education (AOR= 1.54, 95% CI: 1.10, 2.17), present of disability (WHODAS)(AOR= 2.73, 95% CI: 1.13, 6.61) and present of two (AOR= 2.00, 95% CI: 1.32, 3.04) and more or equal than three chronic disease (AOR= 2.29, 95% CI: 1.51, 3.47) were predicted to have poor sexual intimacy. On the other hand, being married (AOR= 0.03, 95% CI: 0.02, 0.06) and received good social support (AOR= 0.59, 95% CI: 0.46, 0.75) from family members and friends were protected factors towards poor sexual intimacy in later life.

Table 2. Multivariate analysis of factors associated with poor sexual intimacy among elderly in Malaysia (n = 1423)

Variable	Simple logistics regression			Multiple logistics regression		
	Crude OR (95% CI)	S.E	p-value	Adjusted OR (95% CI)	S.E	p-value
Age	3.9 (3.05, 5.05)	0.13	<0.001	3.31 (2.41, 4.55)	0.16	<0.001
Gender	3.47 (2.77, 4.35)	0.12	<0.001	2.00 (1.47, 2.69)	0.15	<0.001
Marital status	0.01 (0.007, 0.03)	0.34	<0.001	0.02 (0.01, 0.04)	0.35	<0.001
Ethnicity						
Chinese	1.35 (0.97, 1.88)	0.17	0.072	1.39 (0.91, 2.77)	0.21	0.144
Indian	1.37 (0.84, 2.24)	0.25	0.202	0.89 (0.43, 1.83)	0.36	0.605
Other	3.03 (2.26, 4.07)	1.11	<0.001	2.18 (1.47, 3.23)	0.20	<0.001
Education level	4.25 (3.28, 5.50)	0.13	<0.001	1.54 (1.10, 2.17)	0.18	0.013
Perceived health status						
Satisfactory	1.95 (1.53, 2.50)	0.13	<0.001	-	-	-
Poor	2.00 (1.45, 2.77)	0.17	<0.001	-	-	-
Life satisfaction	1.36 (0.92, 2.00)	0.20	0.123	-	-	-
BMI						
Normal	0.46 (0.29, 0.72)	0.23	0.001	-	-	-
Overweight	0.37 (0.24, 0.57)	0.22	<0.001	-	-	-

Disability (WHODAS)	5.32 (2.53, 11.7)	0.38	<0.001	2.73 (1.13, 6.61)	1.00	0.026
Social support	0.46 (0.37, 0.58)	0.11	<0.001	0.61 (0.46, 0.82)	0.15	0.001
Number of disease present						
1	1.54 (1.14, 2.08)	0.15	0.005	1.49 (1.00, 2.24)	0.21	0.053
2	2.05 (1.49, 2.81)	0.16	<0.001	2.00 (1.32, 3.04)	0.21	0.001
≥3	2.46 (1.80, 3.38)	0.16	<0.001	2.29 (1.51, 3.47)	0.21	<0.001

Abbreviation: OR = odds ratio; 95% CI = 95% confidence interval; S.E = standard error; WHODAS = World Health Organization Disability Assessment Schedule; BMI = body mass index.

Note: Multivariate analysis treated the lowest category level of study variable as a reference level, e.g., age = 60 – 69; gender = male.

IV. DISCUSSION

Sex, physical and emotional intimacies are powerful emotional experiences can be considered as lifelong needs to protect and improve health (McNicoll, 2008). A person can enjoy physically and emotionally fulfilling sex life regardless of the person's age if the person has a good understanding and open mind regarding sexuality. Although sexuality is considered as a key component of intimacy that most of the people want to experience across their lives, it is unfortunate that it is a topic that health care professionals are experiencing difficulty in raising this issue with their patients (Ambler *et al.,* 2012).

The findings of this study revealed the majority of the older people were having poor sexual intimacy evident by their inability to have sex despite still sleeping with their life spouse and not disabled. These findings can be largely affected by the perceived stigma on sexuality among the Malaysian elderly to reveal their sexual interest and desire since the data was collected by face-to-face interviews. The non-response rate (26.4%) showed by the result indicated the presence of a strong stigma among Malaysia elderly on sexuality-related issues. This makes creating awareness and comfort to discuss their sexual needs is a necessity.

Although, the available researches constantly suggest that increase in age reduces sex interest. A survey among Swedish men aged 50 to 80 years old with a response rate of 73%, showed that older respondents had less sexual interest, with 98% of 50 to 59 year old considered it as at least 'some importance' compared with 72% of 70 to 80-year-olds (Helgason *et al.,* 1996). Similarly, another study among the Italians on the quality of life found older participants had less interest in sex, with all 38 centenarians had lost interest in sex (Buono *et al.,* 1998). However, a large study among adults in the USA showed that although sexual interest was lower in older people, 59% of people ranged of 75 to 85 years old still considered the importance of sex (Lindau *et al.*, 2007).

Sexual health is the key to well-being and important aspect of successful ageing and quality relationship in later life (Fisher *et al.,* 2010; Syme, 2015). Unfortunately, risks of sex continue in later years (Minhat *et al.*, 2019b), considering the rising rates of sexually transmitted infections among older people (Centers for Disease Control and Prevention, 2013). The reason for this increase is due to issues such as poor sexual education and self-efficacy among older people, including the importance of sexual protection such as condom use and negotiation skills (Syme, 2015). Given its role in maintaining the well-being of the older people, the sexual taboos in later life should be broken by delivering adequate education and awareness should on the benefit and the protection methods.

Being married and receiving good social support were two factors that contribute to good sexual intimacy in later life based on this study. Meanwhile, aged 70 years old and above, having disability and present of chronic disease more than two were among strong risk factors towards poor sexual intimacy among the elderly population. Poor self-reported physical health has been reported to associate with reduced sex interest with an odds ratio of 1.6 and 2.2 for females and males, respectively (Lindau & Gavrilova, 2010; Lindau *et al.*, 2007). Additionally, the sexual function also affected by psychological problems, including depression (Din *et al.*, 2019) and its treatment, but recognition and proper

treatment were less among older people (Bouman & Arcelus, 2001). As a conclusion, the majority of the elderly people in Malaysia were still sleeping with their spouse, but having poor sexual intimacy evident by the incapability to perform sexual activity. The risk of poor sexual intimacy is higher among those aged 80 years old and above, having a disability and chronic gastritis. The findings also reflect the importance to further explore the sexuality issues among the elderly in Malaysia.

V. ACKNOWLEDGEMENT

The authors are thankful to all respondents, fieldworkers, co-researchers and local authorities involved in this study. This study was supported by the Malaysian Research Institute on Ageing (MyAgeing) and the Institute of Health Behavioral Research, Ministry of Health Malaysia, and funded by the Ministry of Health Malaysia.

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